

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	James Hayden Brownell	Confirmation No.	8895
Serial No.	10/529,343	Group Art Unit:	2828
Filed:	March 25, 2005	Examiner:	Stafford, Patrick
For:	FREE ELECTRON LASER, AND ASSOCIATED COMPONENTS AND METHODS		

July 17, 2008

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR CONFERENCE AND REVIEW

Dear Sir:

In further response to the final Office Action mailed March 21, 2008, in consideration of the Advisory Action mailed June 17, 2008, and pursuant to the Notice of Appeal filed concurrently herewith, please consider the following remarks:

REMARKS

Because both the final Office Action and the Advisory Action merely repeat the original grounds of rejection, Applicant incorporates by reference herein, as part of this Request for Conference and Review, all of the previous meritorious arguments presented in traversal of such rejections. Applicant further requests that this Panel review and reverse the outstanding improper Restriction Requirement as well, in order to avoid the additional step of having to file an unnecessary Petition to the Commissioner.

The Improper Election/Restriction

This panel should see that the the outstanding Restriction Requirement is wholly improper, and also that the Examiner has not responded at all to the substance of Applicant's traversal thereto. Applicant has established on the record – without any challenge – that independent claim 2 is clearly generic to each of independent claims of the application, and therefore, to all of the claims of the application. It is entirely improper to maintain a Restriction when an elected claim is generic to all claims of the application.

The Examiner has never responded to this issue. Instead, the Examiner has repeatedly asserted that subject matter from some of the *dependent* claims warrants the Restriction. The dependent claims, however, are irrelevant to the Restriction. The Examiner has not submitted any factual evidence on the record to establish that the same dependent subject matter must somehow be excluded between the identified "Groups" of inventions. This improper Restriction has some relevance to the substantive rejections, as discussed further below.

Improper Obviousness Rejections

Claims 2-5 and 7-10 improperly stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer (U.S. 4,852,956) in view of Walsh (U.S. 5,263,043). The Examiner's response to Applicant's traversal failed to address the substance of the traversal. Applicant has established that a *prima facie* case of obviousness has not been established, and even could such a case be established, it has been sufficiently overcome on rebuttal.

The references do not teach or suggest the in-phase orientation of the claimed gratings

The Examiner has admitted that the references do not actually teach a pair of grating elements being oriented in phase. The Examiner has only asserted that such would be obvious from Kramer's grating elements that "are *adjustable*," and therefore, "*capable* of being arranged in phase." (Emphases added). It is thus critical to note here that the Examiner has not only asserted that the proposed modification to Kramer is obvious, but also that Kramer's device must be inherently capable of being adjusted to realize such a modification. The rejection has not

established, however, where the reference teaches either assertion. The fact that the rejection fails to use the word "inherency," does not mean that inherency has been asserted.

Kramer, for example, never describes how "adjustable" its cited elements are. The elements therefore could only be adjustable to be in-phase if such were an inherent property of the device. The Examiner admits, however, that inherency has not been established in the rejection. Furthermore, the obviousness of adjusting Kramer's elements to be in-phase has not been established either. The rejection has only established that the element *can be* adjusted, but not necessarily to an in-phase orientation. In-phase orientation is clearly featured in all of the claims, and no portion of Kramer has identified that teaches or suggests in-phase orientation.

The references do not teach rulings in both the rectangular and triangular components (claim 10)

The Examiner's statement that "The claim [10] does not require the rulings to be inside the rectangular and triangular components, but instead requires triangular and rectangular components and that the grating element is ruled" is simply wrong. Applicant cannot understand the Examiner's refusal to examine the actual plain language of claim 10 in this regard, nor the Examiner's refusal to answer the arguments presented before continuing to merely repeat this rejection. Applicant has repeatedly demonstrated how claim 10 includes exactly the limitations the Examiner confusingly asserts to be not present.

No teaching or suggestion to combine Kramer, Walsh, and Hamada has been demonstrated

The obviousness rejection of claim 6 is deficient because the asserted "motivation" to combine the references (from Hamada) has nothing to do with the proposed combination itself, as required by Section 2143.01 of the MPEP. Hamada does not teach or suggest that the cited "sharp moire pattern" will be created or even improved by a combination with Kramer and/or Walsh. The only evidence on the record to support this conclusory assertion is the Examiner's statement of his own personal opinion, which is not sufficient to justify a combination.

Furthermore, the Advisory Action again ignores Applicant's rebuttal argument that "the claimed combination cannot ... render the reference inoperable for its intended purpose." (MPEP Section 2145(III)). Applicant's arguments that the proposed combination would result in an inoperable device remain unchallenged on the record, and therefore even a proper *prima facie* case of obviousness against claim 6 has been overcome, even could one be established.

The references do not teach or suggest a grating horn

With respect to the Examiner's response that "a recitation a grating horn (sic) has not been given patentable weight because the recitation occurs in the preamble," Applicant again points out that regardless of the fact that the words "a grating horn" appear only in the preamble of claim 2, claim 2 nevertheless is a grating horn. A "grating horn" is not an *element* of the claims that is argued, but instead the claimed invention itself. The cited references that have no relation to grating horns are simply not analogous to the pending claims.

Additionally, it was improper to ignore the grating horn aspect of the invention in an obviousness rejection, when the grating horn was also argued in rebuttal to the asserted *prima facie* case of obviousness. Arguments rebutting a case of obviousness may include factors that do not literally appear in the claim language itself, such as advantages that the claimed invention achieves over the cited art combination, for example. There is no dispute in the record that none of the cited art references, alone or together, could function as a grating horn, and the Examiner has never challenged the fact that claim 2 may fully realize a grating horn.

The Panel is reminded here that the rejection of claim 2 is based only on obviousness, and not anticipation. The advantages that the present claims can realize over the prior art are a factor the Examiner was required to consider, especially when presented with the rebuttal arguments, above. Advantages of the invention need not be affirmatively recited in the claims themselves to require their full consideration. Nevertheless, such advantages – when unchallenged on the record – are sufficient to overcome *prima facie* obviousness. Accordingly, this particular rebuttal argument is, by itself, sufficient to overcome even the the asserted *prima*

facie case of obviousness. And, because the rebuttal remains unchallenged on record, the obviousness rejection of claim 2 must be withdrawn for at least these reasons.

The Panel should also take note here of the improper Restriction of the claims, discussed above. Independent claims 2 and 11, for example, differ only in that claim 11 is a system claim that adds an electron beam generator to the grating horn of claim 2. Claim 11 affirmatively recites "a grating horn" in the body of the claim, and claim 2 already features the electron beam within its body. There could have been no serious burden on the Examiner to have examined claims 2 and 11 together when the substance of both claims would encompass the same search and consideration. A successful Petition to reverse the improper Restriction will require the Examiner to consider "a grating horn" as an affirmative element of the claims, and will also, by the Examiner's own acknowledgement, defeat the same obviousness rejection of claim 2.

CONCLUSION

In view of the foregoing Amendments and Remarks, Applicant submits that all of the outstanding issues have been addressed. This Paper is accompanied by a Notice of Appeal, the requisite fee of \$255.00 therefor, as well as a one-month extension fee of \$60.00. No additional fees are believed due; however, should any fees be deemed necessary in connection with this Request, the Commissioner is hereby authorized to charge deposit account 12-0600.

Respectfully submitted,

LATHROP & GAGE, L.C.

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